addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

Amendments

In the Title:

Please substitute the following Title of the Invention for the pending Title of the Invention:

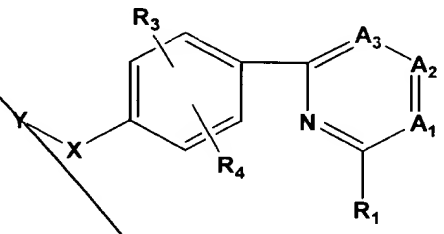
Aryl Substituted Pyrimidines

In the Claims:

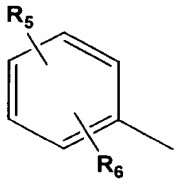
Please cancel claims 13, 16, 27, 30, 40, 49, and 52-58 without prejudice or disclaimer.

Please substitute the following claim 1 for the pending claim 1:

1. (Once amended) A compound having the Formula **I**:



or a pharmaceutically acceptable salt, prodrug or solvate thereof, wherein:

Y is 

or R_7,

provided that when Y is R_7, R_1 is aminocarbonyl;

A_1 is N and A_2 and A_3 are CR_2, or A_3 is N and A_1 and A_2 are CR_2;

R_1 is selected from the group consisting an optionally substituted alkyl, amino, alkylthio, $C(O)R_8$, SO_2R_8, $OC(O)NH_2$, 2-imidazolinyl, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R_2 is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, amino, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or R_1 and R_2 are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R_3, R_4, R_5, and R_6 are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol;

R_7 is an optionally substituted alkyl;

R_8 is selected from the group consisting of alkyl, alkenyl, alkynyl, OR_9, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenyl-amino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R_8 is not OR_9 when R_1 is SO_2R_8; wherein

R_9 is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

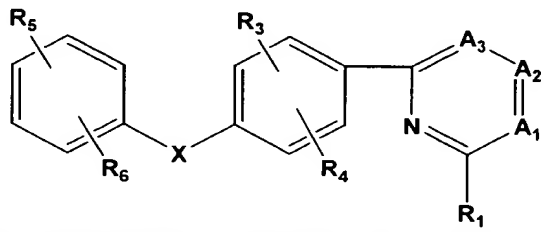
X is one of O, S, NH, or CH_2 when Y is other than R_7; or

X is one of O, S, NH, CH_2 or absent when Y is R_7;

with the proviso that R_2 is not methoxy if R_5 is trifluoromethyl, R_6 is H, X is O and R_1 is SO_2CH_2Ph.

Please substitute the following claim 2 for the pending claim 2:

2. (Once Amended) A compound having the Formula **II**:



or a pharmaceutically acceptable salt, prodrug or solvate thereof, wherein:

A_1 is N and A_2 and A_3 are CR_2, or A_3 is N and A_1 and A_2 are CR_2;

R_1 is selected from the group consisting an optionally substituted alkyl, amino, alkylthio, $C(O)R_8$, SO_2R_8, $OC(O)NH_2$, 2-imidazolinyl, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R_2 is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, amino, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or R_1 and R_2 are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R_3, R_4, R_5, and R_6 are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol; and

R_8 is selected from the group consisting of alkyl, alkenyl, alkynyl, OR_9, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenyl-amino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R_8 is not OR_9 when R_1 is SO_2R_8; wherein

R_9 is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

X is one of O, S, NH, or CH_2;

with the proviso that R_2 is not methoxy if R_5 is trifluoromethyl, R_6 is H, X is O and R_1 is SO_2CH_2Ph.

Please substitute the following claim 3 for the pending claim 3:

3. (Once Amended) The compound of claim 2, wherein A_3 is N and A_1 and A_2 are CR_2.

Please substitute the following claim 18 for the pending claim 18:

18. (Once Amended) The compound of claim 17, wherein A_3 is N and A_1 and A_2 are CR_2.

Please substitute the following claim 26 for the pending claim 26:

26. (Once Amended) The compound of claim 17, wherein

X is O;

A_1 is N and A_2 and A_3 are CR_2; or A_3 is N and A_1 and A_2 are CR_2; wherein

R_2 is selected from the group consisting of hydrogen, alkyl, alkoxy, aminoalkyl, and aminocarbonyl;

R_3 and R_4 are both hydrogen;

R_5 and R_6 are independently selected from the group consisting of hydrogen, alkyl, halogen, haloalkyl, and nitro; and

R_8 is amino.

Please substitute the following claim 32 for the pending claim 32:

32. (Once Amended) The compound of claim 31, wherein R_2 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aminoalkyl, amino, hydroxyalkyl, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino.

Please substitute the following claim 39 for the pending claim 39:

39. (Once Amended) A compound of claim 2, wherein said compound is:

4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxamide;

4-[4-(4-nitrophenoxy)phenyl]pyrimidine-2-carboxamide;

4-[4-(4-methoxyphenoxy)phenyl]pyrimidine-2-carboxamide;

4-[4-(4-trifluoromethylphenoxy)phenyl]pyrimidine-2-carboxamide;

4-[4-(3-chloro-2-cyanophenoxy)phenyl]pyrimidine-2-carboxamide;

4-[4-(4-chloro-2-fluorophenoxy)phenyl]pyrimidine-2-carboxamide;

4-[4-(2,4-difluorophenoxy)phenyl]pyrimidine-2-carboxamide;

4-[4-(2-chloro-4-fluorophenoxy)phenyl]pyrimidine-2-carboxamide;

1-[4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-yl]-ethanone;

2-[4-(4-fluorophenoxy)phenyl]pyrimidine-4-carboxamide;

2-[4-(4-fluorophenoxy)phenyl]-4-methylpyrimidine;

2-methyl-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;

4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid;

4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid sodium salt;

4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid methylamide;

4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid dimethylamide;

4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid *tert*-butylamide;

2-[4-(4-chloro-2-fluorophenoxy)phenyl]pyrimidine-4-carboxamide;

2-[4-(4-chloro-2-fluorophenoxy)phenyl]pyrimidine-4-carboxylic acid;

2-(4-phenoxyphenyl)-6-(dimethylamino)pyrimidine-4-carboxylic acid dimethylamide;

4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid 2-hydroxyethylamide;

4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid hydroxymethyleneamide;

2-(2-hydroxyprop-2-yl)-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;

4-[4-(2,4-difluorophenoxy)phenyl]pyrimidine-2-carboxylic acid 2-morpholin-4-yl-ethyl amide;

2-(4,5-dihydro-1H-imidazol-2-yl)-4-[4-(4-fluorophenoxy)phenyl]-pyrimidine;

2-(3-pyrazolyl)-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;

2-(5-isoxazolyl)-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;

2-(1-methyl-3-pyrazolyl)-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;

2-[4-(4-chloro-2-fluorophenoxy)phenyl]pyrimidine-4-carboxylic acid methylamide;

3-dimethylamino-1-{4-[4-(4-fluorophenoxy)phenyl}pyrimidin-2-yl]propenone;

2-thiomethyl-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;

2-methanesulfonyl-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;

2-[4-(4-chloro-2-fluorophenoxy)phenyl]-4-methyl-pyrimidine;

4-[4-(4-fluorophenoxy)-3-fluorophenyl]pyrimidine-2-carboxamide; or

2-[4-(4-fluorophenoxy)-3-fluorophenyl]pyrimidine-4-carboxamide;

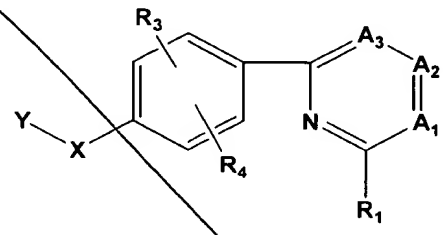
or a pharmaceutically acceptable salt, prodrug or solvate thereof.

Please substitute the following claim 42 for the pending claim 42:

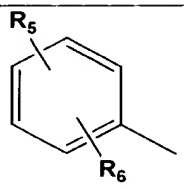
42. (Once Amended) The compound of claim 41, wherein A_3 is N and A_1 and A_2 are CR_2.

Please substitute the following claim 50 for the pending claim 50:

50. (Once Amended) A pharmaceutical composition, comprising the compound of formula:



or a pharmaceutically acceptable salt, prodrug or solvate thereof, wherein:

Y is  or R_7, provided that when Y is R_7, R_1 is aminocarbonyl;

A_1 is N and A_2 and A_3 are CR_2; or A_3 is N and A_1 and A_2 are CR_2;

R_1 is selected from the group consisting an optionally substituted alkyl, amino, alkylthio, $C(O)R_8$, SO_2R_8, $OC(O)NH_2$, 2-imidazolinyl, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R_2 is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, amino, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or R_1 and R_2 are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R_3, R_4, R_5, and R_6 are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol;

R_7 is an optionally substituted alkyl;

R_8 is selected from the group consisting of alkyl, alkenyl, alkynyl, OR_9, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenyl-amino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R_8 is not OR_9 when R_1 is SO_2R_8; wherein

R_9 is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

X is one of O, S, NH, or CH_2 when Y is other than R_7; or

X is one of O, S, NH, CH_2 or absent when Y is R_7; and a pharmaceutically acceptable carrier or diluent.

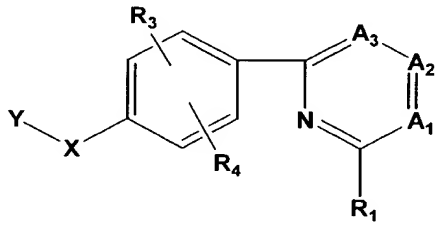
Please add the following claims 59-68:

59. (New) A compound of claim 2, wherein said compound is 2-[4-(4-chloro-2-fluorophenoxy)phenyl]pyrimidine-4-carboxamide or a pharmaceutically acceptable salt, prodrug or solvate thereof.

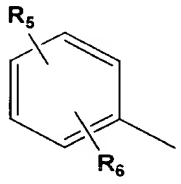
60. (New) A compound of claim 59, which is 2-[4-(4-chloro-2-fluorophenoxy)phenyl]pyrimidine-4-carboxamide.

61. (New) A pharmaceutical composition, comprising the compound of claim 59 or claim 60 and a pharmaceutically acceptable carrier or diluent.

62. (New) A compound of claim 1 having the Formula **I**:



or a pharmaceutically acceptable salt or solvate thereof, wherein:

Y is 

or R_7,

provided that when Y is R_7, R_1 is aminocarbonyl;

A_1 is N and A_2 and A_3 are CR_2; or A_3 is N and A_1 and A_2 are CR_2;

R_1 is selected from the group consisting an optionally substituted alkyl, amino, alkylthio, $C(O)R_8$, SO_2R_8, $OC(O)NH_2$, 2-imidazolinyl, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R_2 is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, amino, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and

aralkylcarbonylamino; or R_1 and R_2 are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R_3, R_4, R_5, and R_6 are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol;

R_7 is an optionally substituted alkyl;

R_8 is selected from the group consisting of alkyl, alkenyl, alkynyl, OR_9, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenyl-amino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R_8 is not OR_9 when R_1 is SO_2R_8; wherein

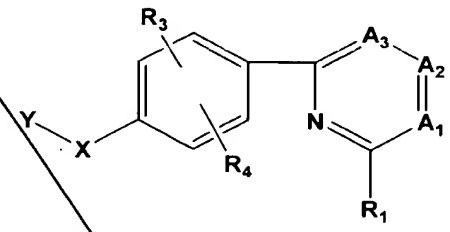
R_9 is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

X is one of O, S, NH, or CH_2 when Y is other than R_7; or

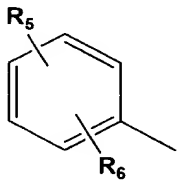
X is one of O, S, NH, CH_2 or absent when Y is R_7;

with the proviso that R_2 is not methoxy if R_5 is trifluoromethyl, R_6 is H, X is O and R_1 is SO_2CH_2Ph.

63. (New) A compound of claim 1 having the Formula **I**:



or a pharmaceutically acceptable salt, prodrug or solvate thereof, wherein:

Y is 

or R_7,

provided that when Y is R_7, R_1 is aminocarbonyl;

A_1 is N and A_2 and A_3 are CR_2; or A_3 is N and A_1 and A_2 are CR_2;

R_1 is selected from the group consisting an optionally substituted alkyl, amino, alkylthio, $C(O)R_8$, SO_2R_8, $OC(O)NH_2$, 2-imidazolinyl, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R_2 is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or R_1 and R_2 are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R_3, R_4, R_5, and R_6 are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol;

R_7 is an optionally substituted alkyl;

R_8 is selected from the group consisting of alkyl, alkenyl, alkynyl, OR_9, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenyl-amino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R_8 is not OR_9 when R_1 is SO_2R_8; wherein

R_9 is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

X is one of O, S, NH, or CH_2 when Y is other than R_7; or

X is one of O, S, NH, CH_2 or absent when Y is R_7;

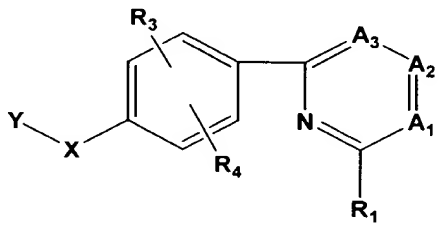
with the proviso that R_2 is not methoxy if R_5 is trifluoromethyl, R_6 is H, X is O and R_1 is SO_2CH_2Ph.

64. (New) The compound of claim 2, wherein A_1 is N and A_2 and A_3 are CR_2.

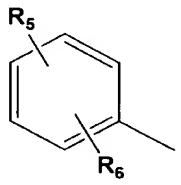
65. (New) The compound of claim 17, wherein A_1 is N and A_2 and A_3 are CR_2.

66. (New) The compound of claim 41, wherein A_1 is N and A_2 and A_3 are CR_2.

67. (New) A pharmaceutical composition of claim 50, comprising the compound of formula:



or a pharmaceutically acceptable salt or solvate thereof, wherein:

Y is 

or R_7, provided that when Y is R_7, R_1 is aminocarbonyl;

A_1 is N and A_2 and A_3 are CR_2; or A_3 is N and A_1 and A_2 are CR_2;

R_1 is selected from the group consisting an optionally substituted alkyl, amino, alkylthio, $C(O)R_8$, SO_2R_8, $OC(O)NH_2$, 2-imidazolinyl, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R_2 is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, amino, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or R_1 and R_2 are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R_3, R_4, R_5, and R_6 are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol;

R_7 is an optionally substituted alkyl;

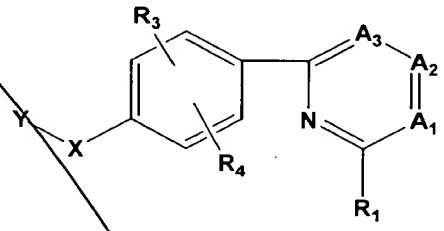
R_8 is selected from the group consisting of alkyl, alkenyl, alkynyl, OR_9, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenyl-amino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R_8 is not OR_9 when R_1 is SO_2R_8; wherein

R_9 is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

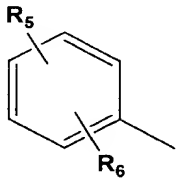
X is one of O, S, NH, or CH_2 when Y is other than R_7; or

X is one of O, S, NH, CH_2 or absent when Y is R_7; and a pharmaceutically acceptable carrier or diluent.

68. (New) A pharmaceutical composition of claim 50, comprising the compound of formula:



or a pharmaceutically acceptable salt, prodrug or solvate thereof, wherein:

Y is 

or R_7, provided that when Y is R_7, R_1 is aminocarbonyl;

A_1 is N and A_2 and A_3 are CR_2; or A_3 is N and A_1 and A_2 are CR_2;

R_1 is selected from the group consisting an optionally substituted alkyl, amino, alkylthio, $C(O)R_8$, SO_2R_8, $OC(O)NH_2$, 2-imidazolinyl, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R_2 is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, alkylamino,

dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or R_1 and R_2 are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R_3, R_4, R_5, and R_6 are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol;

R_7 is an optionally substituted alkyl;

R_8 is selected from the group consisting of alkyl, alkenyl, alkynyl, OR_9, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenyl-amino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R_8 is not OR_9 when R_1 is SO_2R_8; wherein

R_9 is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

X is one of O, S, NH, or CH_2 when Y is other than R_7; or

X is one of O, S, NH, CH_2 or absent when Y is R_7; and a pharmaceutically acceptable carrier or diluent.